NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 9
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INSPECTION REPORT

Spill Number: 2008000 **Inspection Date:** 03/11/21

Site Name: Mayville **Location:** Village of Mayville

Site Inspectors: Stanley Radon, Steven Moeller, Joshua Vaccaro

Weather Conditions: *Sunny, slight breeze, 59ºF. Scattered rain showers in afternoon.*

Description of Work Performed:

Arrived onsite: 1025

- DEC staff arrived at the former football field of the Town of Chautauqua Municipal Building (TCMB). Our vehicles were parked along the north side Route 430. Throughout the Village most of the snow had already melted but in some areas snow cover still existed. DEC staff inspected the outfall located in the woods on the south side of the football field. The discharge flow rate appeared to be equivalent of last site visit (approximately 10 gallons per minute). Inspection of the lower tier of the former football field revealed linear lines of un-melted snow trending in the northwest/southeast direction across the entire lower tier (Images 5 through 8). Based on the layout of the linear lines across the field, the lines were suspected to be drainage components installed within the subsurface. A total of seven (7) linear lines of snow were apparent. A north-northeast/south-southwest trending angled line of un-melted snow intercepted each of the linear lines and ultimately connected with a catch basin on the south end of the lower tier. Within the catch basin, the direction of the inflowing pipe corresponded with the direction of the angled line of snow. This confirmed the relationship of pipe direction and the presence of snow. Additionally, the direction of the outflowing pipe aligned with the outfall located within the wooded area to the southwest of the catch basin. As DEC staff reached the upper tiers of the former football field, the lines of snow across the bottom tier became more evident. A sample (Sample ID: Outfall SW-1) was collected for laboratory analysis from the outfall location to compare with the analytical results from the previous January 7, 2020 sampling event.

  The flush-mount protective casings and concrete well pads for DEC installed monitoring wells MW-6 and MW-7 appeared to be in good condition. Drill cuttings were piled on poly sheeting next to each of the monitoring wells. The stakes from the 4 surface soil locations were still in place on the upper tier, the suspected location of aqueous film forming foam (AFFF) spraying. At the Chautauqua County Emergency Service garage, the door was open, and staff were present. DEC staff returned later to conduct interviews.

- DEC staff then inspected the concrete lined drainage ditch along the northern side of Route 430. Discharge from the outfall flows into the concrete lined ditch, approximately 175-feet from the south corner of the bottom tier of the field. The outfall discharge merges with the highway runoff and travels approximately 350-feet southwest along the north side of Route 430 to a catch basin. The catch basin diverts the flow beneath the highway to the southern side of Route 430. The flow then discharges into a concrete lined ditch on the southern side of the highway. The concrete lined ditch transports the flow in the southwestern direction towards Patterson Street. The flow then travels below Patterson Street and daylights in an open ditch on the opposite side of the street. On the opposite side of Patterson Street, the ditch is not lined. The flow travels along the south side of Route 430 for another quarter mile before discharging into Mud Creek. A previous surface water sample was collected near this location (Mud Creek – Sherman Mayville Rd) during the January 7, 2020 sampling event. However, the January 7th sample was collected on the southwestern bank of Mud Creek, opposite where the discharge originating from the TCMB football field discharges into Mud Creek. This sample would have been diluted by upstream flow from Mud Creek.

  During the March 11, 2020 site visit, Mud Creek had substantial flow due to snow melt. This caused stagnant water to back up in the ditches that discharge into the creek. Therefore, a sample was collected from the inflowing water leading to the ditch. The sample was collected on the south side of Route 430 northeast of Mud Creek, across the street from 5597 Route 430. (Sample ID: Mud Creek – ShermanMayville).

- DEC staff then inspected the wooded area located to the north of Supply Well 3. Upon arrival at Supply Well 3, a trailer marked “StreamGo Water Solutions” was parked next to the Supply Well. Three large tanks and a petroleum tank were setup next to the trailer. The tanks appeared to be a pilot system for water treatment. No representatives were around to interview. The flush-mount protective casing and concrete well pad for newly installed well MW-4 appeared to be in good condition; drill cuttings were placed on poly sheeting next to the monitoring well.

  The wooded area to the north of Supply Well 3 was swampy, with several ruts and areas of ponding water. Some of the ruts appeared to have been created by a vehicle that traveled from Supply Well 3 towards a ditch located within the wooded area. The ditch is located approximately 220 feet to the north of Supply Well 3. The ditch is suspected to be the former channel for the “Mill Raceway” identified on historical maps of the area. The ditch trended in an east/west direction, parallel to Paterson Street. The width of the ditch varied and, in some areas, appeared to have been filled in. The water within the ditch was stagnant. Inflowing drainage rills from upslope areas to the north supplied the ditch. The drainage rills were tracked to determine the source of the flow. The flow appeared to be coming from multiple areas of groundwater seeps. One of the branches came from the northwest direction, the direction of Route 430. A surface water sample was collected for

laboratory analysis from the standing water within the “Mill Raceway” north-northwest of Supply Well 3 (Sample ID: Raceway). An additional surface water sample was collected north-northeast of Supply Well 3 from flowing water in a rill just before it entered a section of the “Mill Raceway” ditch (Sample ID: Slope Drainage).

- DEC staff returned to the upper tier of the TCMB to conduct interviews at the Chautauqua County Emergency Operations Building. Dan Imfeld (Deputy Fire Coordinator-Hazmat Chautauqua County Emergency Services) spoke with DEC staff regarding his knowledge of AFFF use at the facility. Below is a summary of the discussion:

    - Chautauqua County Emergency Services moved to the TCMB facility in 2007. The upper tier of the former football field had been used on several occasions for AFFF training, including:

        - September 4, 2014 - 40 gallons of fluoroprotein foam from the old IOGA trailer (possibly Angus Fire ALCOSEAL 3%-6% foam concentrate; see discussion in next full paragraph below).
        - August 6, 2015 - 55 gallons of AFFF foam donated by Allied Alarm (unknown foam concentrate type).
        - June 2, 2016 - The Chautauqua County Hazardous Materials Response Team received an AR-AFFF foam trailer (“NYS Foam Trailer”) from the New York State Office of Fire Prevention & Control (OFPC) in January 2016 and received in-service training on June 2, 2016 with “State-supplied” foam.
        - September 7, 2017 - NYS Foam Trailer refresher training with “State-supplied” training foam. OFPC estimated that approximately 15 gallons of a combination of Class A foam concentrates (ICL Performance Products LP - PHOS-CHEK® WD881 Class A Foam Concentrate and National Foam - KnockDown Class A Foam Concentrate) were used during the training session. Class A foams are typically not made with PFAS-based surfactants and are therefore not a likely source of PFAS in the environment.
        - September 5, 2018 - NYS Foam Trailer refresher training with “State-supplied” training foam. OFPC estimated that approximately 15 gallons of a combination of Class A foam concentrates (ICL Performance Products LP - PHOS-CHEK® WD881 Class A Foam Concentrate and National Foam - KnockDown Class A Foam Concentrate) were used during the training session. Class A foams are typically not made with PFAS-based surfactants and are therefore not a likely source of PFAS in the environment.

Mr. Imfeld also provided DEC staff with a tour of the equipment and the facility. The “NYS Foam Trailer” was located in the southernmost garage and was outfitted with two 330-gallon totes of National Foam - Universal Gold 1%-3% AR-AFFF foam concentrate. The northernmost garage had two ~32-gallon Angus AF-120 Foam Unit carts (now empty) from the former IOGA trailer. There were also ~65 x 5-gallon containers of CHEMGUARD 3%-6% AR-AFFF foam concentrate (purchased in May 2015), ~5 x 5-gallon containers of CHEMGUARD Class A Plus foam concentrate, and 1 x 5-gallon container of Angus Fire ALCOSEAL 3%-6% foam concentrate (looked older). Angus ALCOSEAL 3%-6% is reportedly an Alcohol Resistant Film-Forming FluoroProtein (AR-FFFP) and may have been the fluoroprotein foam in the two Angus AF-120 Foam Unit carts from the old IOGA trailer used for training on September 4, 2014. A brochure for the current version of the Angus AF-120 Mobile Foam Unit recommends use with Angus ALCOSEAL FFFP.

- DEC staff investigated the wooded area southwest of the lower football field tier, west of the outfall. Occasional tires and other surficial debris were present in the woods. West of the lower football field tier outfall, a dry ditch was observed extended in a northwesterly direction. It appears a surface water drainage divide exists between the outfall, which drains southward towards Route 430, and the ditch located to the northwest. The ditch drains to the northwest, then shifts to the west and southwest down a steep bank. A groundwater seep was identified within the ditch approximately 120-feet southwest of the lower football field tier, downgradient of the AFFF training area; the elevation difference between the lower tier and the groundwater seep was at least 30 to 40 feet. A water sample was collected for laboratory analysis from the groundwater seep (Sample ID: Groundwater Seep).

- Prior to departing Mayville, DEC staff traveled to the Mayville Department of Public Works. No representatives were available within the building to interview, but it was noted that several Alpha Analytical coolers were stacked by the door of the Public Works Building.

- All five (5) surface water samples were collected by direct filling or immersion of the sample bottles; no other sampling equipment was utilized. The samples were placed into a cooler on ice and delivered under chain-of-custody control to Eurofins Lab in Amherst, NY for PFAS analysis of 21 compounds (Method 537, modified). Table 1 presents a description of the samples collected. The sample results are shown on Table 2 and on the attached analytical report. Figure 1 displays the locations of the samples collected on March 11, 2021. Figure 2 displays the sample locations from both sample events.

Attachments: Tables, Figures, Images, and Analytical Report

March 11, 2021

Table 1: Water Samples Collected – March 11, 2021				
Sample Location	**Sample ID**	**Sample Date**	**Sample Time**	**Analysis Performed**
Town of Chautauqua Municipal Building Area (Outfall)	Outfall SW-1	03/11/21	12:45	PFAS - method 537, modified (21 Analytes)
South Highway Ditch Feeding Mud Creek – Sherman-Mayville Road	Mud Creek - Sherman Mayville	03/11/21	13:10	PFAS - method 537, modified (21 Analytes)
Patterson St – Wooded Area North-Northeast of Supply Well 3	Slope Drainage	03/11/21	13:30	PFAS - method 537, modified (21 Analytes)
Patterson St – Wooded Area North-Northwest of Supply Well 3	Raceway	03/11/21	13:40	PFAS - method 537, modified (21 Analytes)
Town of Chautauqua Municipal Building Area (Groundwater Seep West of Outfall)	Groundwater Seep	03/11/21	14:30	PFAS - method 537, modified (21 Analytes)

Table 2
Summary of Surface Water Analytical Results for PFAS
NYSDEC PFAS Investigation
Mayville, Spill No. 2008000
Mayville, New York

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Sample ID Sample Date	NYSDEC Water Screening Values ●	Outfall SW-1 03/11/2020	Mud Creek - Sherman Mayville 03/11/2020	Slope Drainage 03/11/2020	Raceway 03/11/2020	Groundwater Seep 03/11/2020
Per- and Polyfluoroalkyl Substances (PFAS) (ng/L)						
Perfluorobutanoic acid (PFBA)	100	23	12	ND	ND	ND
Perfluoropentanoic acid (PFPeA)	100	110	55	0.57 J	ND	1 J
Perfluorohexanoic acid (PFHxA)	100	67	32	0.58 J	ND	0.82 J
Perfluoroheptanoic acid (PFHpA)	100	85	39	0.76 J	0.62 J	0.54 J
Perfluorooctanoic acid (PFOA)	10	210	77	2	ND	1 J
Perfluorododecanoic acid (PFDoA)	100	60	6.1	ND	ND	ND
Perfluorotetradecanoic acid (PFTeA)	100	5.7	0.88 J	ND	ND	ND
Perfluorobutanesulfonic acid (PFBS)	100	0.7 J	0.6 J	1.4 J	ND	0.36 J
Perfluorohexanesulfonic acid (PFHxS)	100	1 J	1 J	0.55 J	ND	0.58 J
Perfluorooctanesulfonic acid (PFOS)	10	3.3	3.4	1.8	1.3 J	0.57 J
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	100	80	20	ND	ND	ND
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	100	140	21	ND	ND	ND
Perfluorononanoic acid (PFNA)	100	10000	4000	20	0.97 J	1.5 J
Perfluorodecanoic acid (PFDA)	100	700	150	ND	ND	ND
Perfluoroundecanoic acid (PFUnA)	100	7900	1800	1.3 J	ND	ND
Perfluorotridecanoic acid (PFTriA)	100	420	19	ND	ND	ND

Notes:

● = Sampling, Analysis, and Assessment of Per- and Polyfluoroakyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs, NYSDEC, October 2020. The values shown for PFOS and PFOA are the maximum contaminant levels for drinking water found in 10 NYCRR Part 5: Drinking Water Supplies, NYSDOH, Updated August 26,2020.

Notes (continued):

J = Analyte was positively identified at an estimated concentration.
NA = Not analyzed.
ND = Not detected; contaminant was analyzed for but not detected at or above the laboratory detection limit.
ng/L = micrograms per liter or parts per trillion.
(5.6) = Results from a duplicate sample.
Yellow shaded values exceed NYSDEC water screening values or NYSDOH drinking standards.

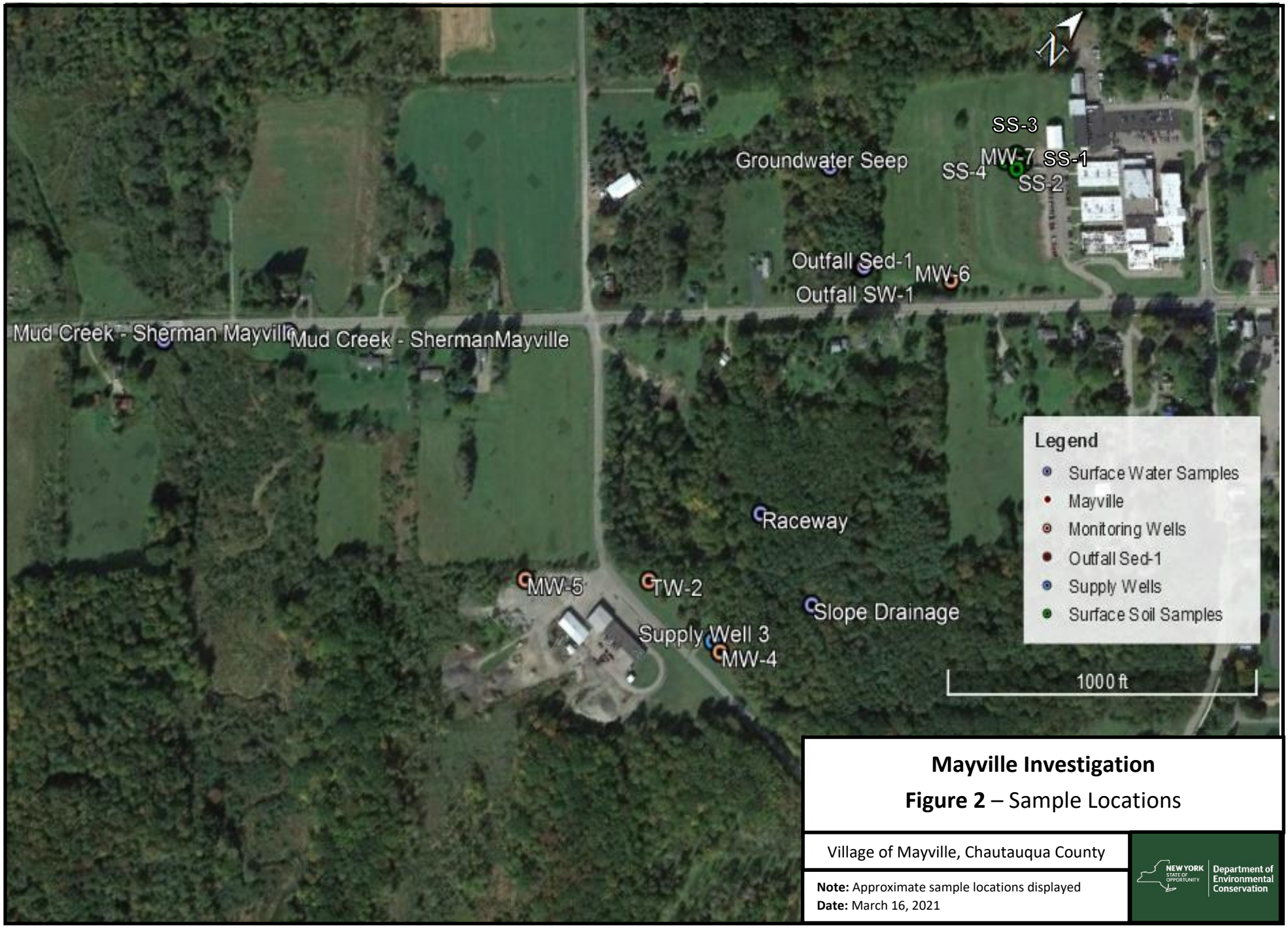
Mayville Investigation

Figure 1 – Sample Locations 3/11/21

Village of Mayville, Chautauqua County

Note: Approximate sample locations displayed
Date: March 16, 2021

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation



Mayville Investigation

Figure 2 – Sample Locations

Village of Mayville, Chautauqua County

Note: Approximate sample locations displayed
Date: March 16, 2021

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

March 11, 2021

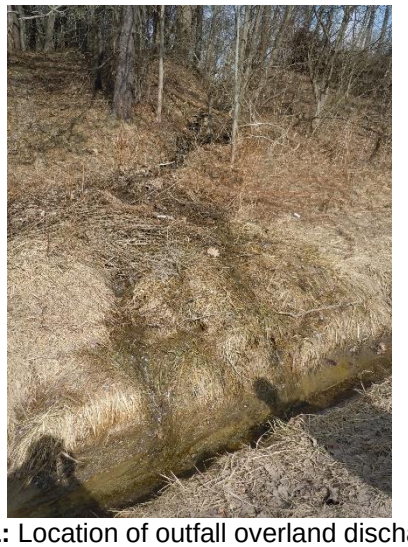


Image 1: Location of outfall overland discharge entering concrete lined highway ditch on north side of Route 430.

Image 2: Concrete lined ditch on north side of Route 430 (southwest view direction).

Image 3: Outfall of drainage system at lower tier of the former football field at TCMB. Sample “Outfall SW-1” collected from discharge.

Image 4: Catch basin on south corner of the lower tier of the former football field.

Image 5: Lines of un-melted snow on lower tier of former football field.

Image 6: Lines of un-melted snow on lower tier of former football field (southwest view direction).

Image 7: Lines of un-melted snow on lower tier of former football field (west view direction).

Image 8: Lines of un-melted snow on lower tier of former football field (southwest view direction).

Image 9: DEC installed well MW-6.

Image 10: DEC installed well MW-7 and surface soil sample locations.

Image 11: Concrete lined ditch on north side of Route 430 leading to catch basin (southwest view direction).

Image 12: Catch basin diverting flow from north side of Route 430 to concrete lined ditch on south side (northeast view direction).

Image 13: Pipe from catch basin (discharge end) diverting flow to south side of Route 430.

Image 14: Highway ditch on south side of Route 430, Patterson Street ahead (southwest view direction).

Image 15: StreamGo Water Solutions trailer adjacent to Supply Well 3 building.

Image 16: Temporary tanks adjacent to Supply Well 3 building.

Image 17: Ditch in wooded area north of Supply Well 3. Suspected former “Mill Raceway.”

Image 18: Vehicle ruts leading from Supply Well 3 to ditch to the north.

Image 19: Drainage rill flowing into ditch (former "Mill Raceway") north of Supply Well 3. Sample collected at location (Sample ID: Slope Drainage).

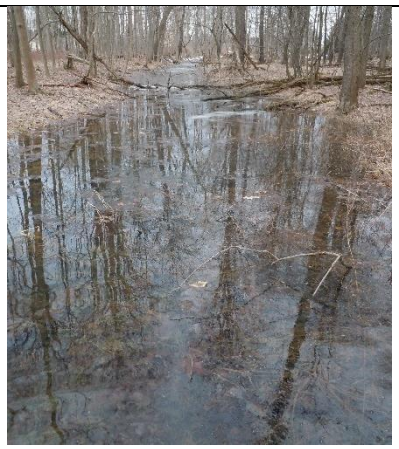


Image 20: Suspected former "Mill Raceway" in westerly directon. Sample collected (Sample ID: Raceway).

Image 21: Drainage ditch leading to Mud Creek, south side of Sherman-Mayville Road. Sample collected at location (Sample ID: Mud Creek Sherman Mayville)

Image 22: Drainage ditch on south side of Sherman-Mayville Road leading to Mud Creek (northwest view direction).

Image 23: Ditch southwest of lower tier. Sample collected (Sample ID: Groundwater Seep)

Image 24: Ditch southwest of lower tier.

Image 25: Angus AF-120 Foam Unit cart (empty) from the former IOGA trailer

Image 26: AFFF Storage at the Emergency Operations Center. Note CHEMGUARD 3%-6% AR-AFFF foam concentrate labeled May 2015.

Image 27: AFFF Storage at the Emergency Operations Center (Angus Fire ALCOSEAL 3%-6% AR-FFFP foam concentrate).

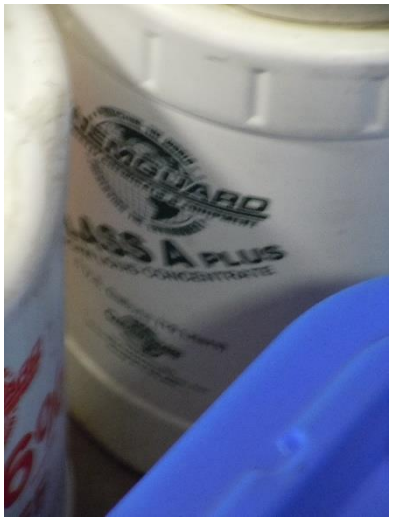


Image 28: AFFF Storage at the Emergency Operations Center (CHEMGUARD Class A Plus foam concentrate).

Image 29: AFFF Storage at the Emergency Operations Center (CHEMGUARD Class A Plus foam concentrate).

Image 30: "NYS Foam Trailer" outfitted with two 330-gallon totes of National Foam - Universal Gold 1%-3% AR-AFFF foam concentrate.

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-71242-1
Client Project/Site: Mayville #2008000-DEC PIN: H7221

For:
New York State D.E.C.
625 Broadway
Division of Environmental Remediation
Albany, New York 12233-7014

Attn: Mr. Joshua Vaccaro

Authorized for release by:
3/25/2021 1:08:44 PM

Orlette Johnson, Senior Project Manager
(484)685-0864
Orlette.Johnson@Eurofinset.com

Table of Contents

Definitions/Glossary

Client: New York State D.E.C. Job ID: 320-71242-1
Project/Site: Mayville #2008000-DEC PIN: H7221

Qualifiers

LCMS

Qualifier	Qualifier Description
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 320-71242-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-71242-1

Receipt
The samples were received on 3/13/2021 9:05 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.5º C.

LCMS
Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analyte was outside of the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgment was used to positively identify the analytes. Mud Creek Sherman Mayville (320-71242-2) and Raceway (320-71242-4)

Method 537 (modified): Results for samples Outfall SW-1 (320-71242-1) and Mud Creek Sherman Mayville (320-71242-2) were reported from the analysis of a diluted extract due to high concentration of the target analyte in the analysis of the undiluted extract. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-471417.

3535 PFC
Aqueous
320-471417

Method 3535: The following samples were cloudy prior to extraction:
Outfall SW-1 (320-71242-1), Mud Creek Sherman Mayville (320-71242-2), Slope Drainage (320-71242-3), Raceway (320-71242-4) and Groundwater Seep (320-71242-5)

3535 PFC
Aqueous
320-471417

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client: New York State D.E.C.
Job ID: 320-71242-1
Project/Site: Mayville #2008000-DEC PIN: H7221

Client Sample ID: Outfall SW-1
Lab Sample ID: 320-71242-1
Date Collected: 03/11/21 12:45
Matrix: Water
Date Received: 03/13/21 09:05

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**23**		4.2	2.0	ng/L		03/17/21 19:38	03/23/21 03:14	1
Perfluoropentanoic acid (PFPeA)	**110**		1.7	0.41	ng/L		03/17/21 19:38	03/23/21 03:14	1
Perfluorohexanoic acid (PFHxA)	**67**		1.7	0.48	ng/L		03/17/21 19:38	03/23/21 03:14	1
Perfluoroheptanoic acid (PFHpA)	**85**		1.7	0.21	ng/L		03/17/21 19:38	03/23/21 03:14	1
Perfluorooctanoic acid (PFOA)	**210**		1.7	0.71	ng/L		03/17/21 19:38	03/23/21 03:14	1
Perfluorododecanoic acid (PFDoA)	**60**		1.7	0.46	ng/L		03/17/21 19:38	03/23/21 03:14	1
Perfluorotetradecanoic acid (PFTeA)	**5.7**		1.7	0.61	ng/L		03/17/21 19:38	03/23/21 03:14	1
Perfluorobutanesulfonic acid (PFBS)	**0.70**	**J**	1.7	0.17	ng/L		03/17/21 19:38	03/23/21 03:14	1
Perfluorohexanesulfonic acid (PFHxS)	**1.0**	**J**	1.7	0.48	ng/L		03/17/21 19:38	03/23/21 03:14	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16	ng/L		03/17/21 19:38	03/23/21 03:14	1
Perfluorooctanesulfonic acid (PFOS)	**3.3**		1.7	0.45	ng/L		03/17/21 19:38	03/23/21 03:14	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27	ng/L		03/17/21 19:38	03/23/21 03:14	1
Perfluorooctanesulfonamide (FOSA)	ND		1.7	0.82	ng/L		03/17/21 19:38	03/23/21 03:14	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.2	1.0	ng/L		03/17/21 19:38	03/23/21 03:14	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.2	1.1	ng/L		03/17/21 19:38	03/23/21 03:14	1
6:2 FTS	**80**		4.2	2.1	ng/L		03/17/21 19:38	03/23/21 03:14	1
8:2 FTS	**140**		1.7	0.38	ng/L		03/17/21 19:38	03/23/21 03:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*89*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:14*	*1*
13C5 PFPeA	*56*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:14*	*1*
13C2 PFHxA	*106*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:14*	*1*
13C4 PFHpA	*94*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:14*	*1*
13C4 PFOA	*114*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:14*	*1*
13C2 PFDoA	*115*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:14*	*1*
13C2 PFTeDA	*107*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:14*	*1*
13C3 PFBS	*71*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:14*	*1*
18O2 PFHxS	*107*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:14*	*1*
13C4 PFOS	*71*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:14*	*1*
13C8 FOSA	*107*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:14*	*1*
d3-NMeFOSAA	*120*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:14*	*1*
d5-NEtFOSAA	*47*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:14*	*1*
M2-6:2 FTS	*119*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:14*	*1*
M2-8:2 FTS	*107*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:14*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	**10000**		84	11	ng/L		03/17/21 19:38	03/24/21 01:20	50
Perfluorodecanoic acid (PFDA)	**700**		84	13	ng/L		03/17/21 19:38	03/24/21 01:20	50
Perfluoroundecanoic acid (PFUnA)	**7900**		84	46	ng/L		03/17/21 19:38	03/24/21 01:20	50
Perfluorotridecanoic acid (PFTriA)	**420**		84	54	ng/L		03/17/21 19:38	03/24/21 01:20	50

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C5 PFNA	*109*		*25 - 150*	*03/17/21 19:38*	*03/24/21 01:20*	*50*

Client Sample ID: Outfall SW-1
Lab Sample ID: 320-71242-1

Date Collected: 03/11/21 12:45
Matrix: Water
Date Received: 03/13/21 09:05

Method: 537 (modified) - Fluorinated Alkyl Substances - DL (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDA	111		25 - 150	03/17/21 19:38	03/24/21 01:20	50
13C2 PFUnA	120		25 - 150	03/17/21 19:38	03/24/21 01:20	50
13C2 PFDoA	96		25 - 150	03/17/21 19:38	03/24/21 01:20	50

Client Sample ID: Mud Creek Sherman Mayville
Lab Sample ID: 320-71242-2

Date Collected: 03/11/21 13:10
Matrix: Water
Date Received: 03/13/21 09:05

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**12**		4.5	2.1	ng/L		03/17/21 19:38	03/23/21 03:23	1
Perfluoropentanoic acid (PFPeA)	**55**		1.8	0.44	ng/L		03/17/21 19:38	03/23/21 03:23	1
Perfluorohexanoic acid (PFHxA)	**32**		1.8	0.52	ng/L		03/17/21 19:38	03/23/21 03:23	1
Perfluoroheptanoic acid (PFHpA)	**39**		1.8	0.22	ng/L		03/17/21 19:38	03/23/21 03:23	1
Perfluorooctanoic acid (PFOA)	**77**		1.8	0.76	ng/L		03/17/21 19:38	03/23/21 03:23	1
Perfluorodecanoic acid (PFDA)	**150**		1.8	0.28	ng/L		03/17/21 19:38	03/23/21 03:23	1
Perfluorododecanoic acid (PFDoA)	**6.1**		1.8	0.49	ng/L		03/17/21 19:38	03/23/21 03:23	1
Perfluorotridecanoic acid (PFTriA)	**19**		1.8	1.2	ng/L		03/17/21 19:38	03/23/21 03:23	1
Perfluorotetradecanoic acid (PFTeA)	**0.88**	**J I**	1.8	0.65	ng/L		03/17/21 19:38	03/23/21 03:23	1
Perfluorobutanesulfonic acid (PFBS)	**0.60**	**J**	1.8	0.18	ng/L		03/17/21 19:38	03/23/21 03:23	1
Perfluorohexanesulfonic acid (PFHxS)	**1.0**	**J**	1.8	0.51	ng/L		03/17/21 19:38	03/23/21 03:23	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		03/17/21 19:38	03/23/21 03:23	1
Perfluorooctanesulfonic acid (PFOS)	**3.4**		1.8	0.48	ng/L		03/17/21 19:38	03/23/21 03:23	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29	ng/L		03/17/21 19:38	03/23/21 03:23	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.87	ng/L		03/17/21 19:38	03/23/21 03:23	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.5	1.1	ng/L		03/17/21 19:38	03/23/21 03:23	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.5	1.2	ng/L		03/17/21 19:38	03/23/21 03:23	1
6:2 FTS	**20**		4.5	2.2	ng/L		03/17/21 19:38	03/23/21 03:23	1
8:2 FTS	**21**		1.8	0.41	ng/L		03/17/21 19:38	03/23/21 03:23	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	84		25 - 150	03/17/21 19:38	03/23/21 03:23	1
13C5 PFPeA	47		25 - 150	03/17/21 19:38	03/23/21 03:23	1
13C2 PFHxA	107		25 - 150	03/17/21 19:38	03/23/21 03:23	1
13C4 PFHpA	88		25 - 150	03/17/21 19:38	03/23/21 03:23	1
13C4 PFOA	109		25 - 150	03/17/21 19:38	03/23/21 03:23	1
13C2 PFDA	131		25 - 150	03/17/21 19:38	03/23/21 03:23	1
13C2 PFDoA	126		25 - 150	03/17/21 19:38	03/23/21 03:23	1
13C2 PFTeDA	110		25 - 150	03/17/21 19:38	03/23/21 03:23	1
13C3 PFBS	71		25 - 150	03/17/21 19:38	03/23/21 03:23	1
18O2 PFHxS	112		25 - 150	03/17/21 19:38	03/23/21 03:23	1
13C4 PFOS	88		25 - 150	03/17/21 19:38	03/23/21 03:23	1
13C8 FOSA	118		25 - 150	03/17/21 19:38	03/23/21 03:23	1
d3-NMeFOSAA	124		25 - 150	03/17/21 19:38	03/23/21 03:23	1
d5-NEtFOSAA	80		25 - 150	03/17/21 19:38	03/23/21 03:23	1

Client Sample ID: Mud Creek Sherman Mayville
Lab Sample ID: 320-71242-2
Date Collected: 03/11/21 13:10
Matrix: Water
Date Received: 03/13/21 09:05

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
M2-6:2 FTS	*118*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:23*	*1*
M2-8:2 FTS	*130*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:23*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	**4000**		36	4.8	ng/L		03/17/21 19:38	03/24/21 00:33	20
Perfluoroundecanoic acid (PFUnA)	**1800**		36	20	ng/L		03/17/21 19:38	03/24/21 00:33	20

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFNA	*119*		*25 - 150*	*03/17/21 19:38*	*03/24/21 00:33*	*20*
13C2 PFUnA	*131*		*25 - 150*	*03/17/21 19:38*	*03/24/21 00:33*	*20*

Client Sample ID: Slope Drainage
Lab Sample ID: 320-71242-3
Date Collected: 03/11/21 13:30
Matrix: Water
Date Received: 03/13/21 09:05

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.4	2.1	ng/L		03/17/21 19:38	03/23/21 03:33	1
Perfluoropentanoic acid (PFPeA)	**0.57**	**J**	1.8	0.43	ng/L		03/17/21 19:38	03/23/21 03:33	1
Perfluorohexanoic acid (PFHxA)	**0.58**	**J**	1.8	0.51	ng/L		03/17/21 19:38	03/23/21 03:33	1
Perfluoroheptanoic acid (PFHpA)	**0.76**	**J**	1.8	0.22	ng/L		03/17/21 19:38	03/23/21 03:33	1
Perfluorooctanoic acid (PFOA)	**2.0**		1.8	0.74	ng/L		03/17/21 19:38	03/23/21 03:33	1
Perfluorononanoic acid (PFNA)	**20**		1.8	0.24	ng/L		03/17/21 19:38	03/23/21 03:33	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.27	ng/L		03/17/21 19:38	03/23/21 03:33	1
Perfluoroundecanoic acid (PFUnA)	**1.3**	**J**	1.8	0.96	ng/L		03/17/21 19:38	03/23/21 03:33	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.48	ng/L		03/17/21 19:38	03/23/21 03:33	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.1	ng/L		03/17/21 19:38	03/23/21 03:33	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.64	ng/L		03/17/21 19:38	03/23/21 03:33	1
Perfluorobutanesulfonic acid (PFBS)	**1.4**	**J**	1.8	0.18	ng/L		03/17/21 19:38	03/23/21 03:33	1
Perfluorohexanesulfonic acid (PFHxS)	**0.55**	**J**	1.8	0.50	ng/L		03/17/21 19:38	03/23/21 03:33	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		03/17/21 19:38	03/23/21 03:33	1
Perfluorooctanesulfonic acid (PFOS)	**1.8**		1.8	0.47	ng/L		03/17/21 19:38	03/23/21 03:33	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		03/17/21 19:38	03/23/21 03:33	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.86	ng/L		03/17/21 19:38	03/23/21 03:33	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.4	1.1	ng/L		03/17/21 19:38	03/23/21 03:33	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.4	1.1	ng/L		03/17/21 19:38	03/23/21 03:33	1
6:2 FTS	ND		4.4	2.2	ng/L		03/17/21 19:38	03/23/21 03:33	1
8:2 FTS	ND		1.8	0.40	ng/L		03/17/21 19:38	03/23/21 03:33	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	*88*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:33*	*1*
13C5 PFPeA	*50*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:33*	*1*
13C2 PFHxA	*114*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:33*	*1*
13C4 PFHpA	*96*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:33*	*1*
13C4 PFOA	*112*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:33*	*1*

Client Sample ID: Slope Drainage
Lab Sample ID: 320-71242-3
Date Collected: 03/11/21 13:30
Matrix: Water
Date Received: 03/13/21 09:05

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C5 PFNA	*117*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:33*	*1*
13C2 PFDA	*124*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:33*	*1*
13C2 PFUnA	*146*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:33*	*1*
13C2 PFDoA	*118*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:33*	*1*
13C2 PFTeDA	*104*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:33*	*1*
13C3 PFBS	*83*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:33*	*1*
18O2 PFHxS	*111*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:33*	*1*
13C4 PFOS	*113*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:33*	*1*
13C8 FOSA	*124*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:33*	*1*
d3-NMeFOSAA	*120*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:33*	*1*
d5-NEtFOSAA	*124*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:33*	*1*
M2-6:2 FTS	*107*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:33*	*1*
M2-8:2 FTS	*129*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:33*	*1*

Client Sample ID: Raceway
Lab Sample ID: 320-71242-4
Date Collected: 03/11/21 13:40
Matrix: Water
Date Received: 03/13/21 09:05

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.4	2.1	ng/L		03/17/21 19:38	03/23/21 03:42	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.43	ng/L		03/17/21 19:38	03/23/21 03:42	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.51	ng/L		03/17/21 19:38	03/23/21 03:42	1
Perfluoroheptanoic acid (PFHpA)	**0.62**	**J**	1.8	0.22	ng/L		03/17/21 19:38	03/23/21 03:42	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.74	ng/L		03/17/21 19:38	03/23/21 03:42	1
Perfluorononanoic acid (PFNA)	**0.97**	**J**	1.8	0.24	ng/L		03/17/21 19:38	03/23/21 03:42	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.27	ng/L		03/17/21 19:38	03/23/21 03:42	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.96	ng/L		03/17/21 19:38	03/23/21 03:42	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.48	ng/L		03/17/21 19:38	03/23/21 03:42	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.1	ng/L		03/17/21 19:38	03/23/21 03:42	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.64	ng/L		03/17/21 19:38	03/23/21 03:42	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.18	ng/L		03/17/21 19:38	03/23/21 03:42	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.50	ng/L		03/17/21 19:38	03/23/21 03:42	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		03/17/21 19:38	03/23/21 03:42	1
Perfluorooctanesulfonic acid (PFOS)	**1.3**	**J I**	1.8	0.47	ng/L		03/17/21 19:38	03/23/21 03:42	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		03/17/21 19:38	03/23/21 03:42	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.86	ng/L		03/17/21 19:38	03/23/21 03:42	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.4	1.1	ng/L		03/17/21 19:38	03/23/21 03:42	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.4	1.1	ng/L		03/17/21 19:38	03/23/21 03:42	1
6:2 FTS	ND		4.4	2.2	ng/L		03/17/21 19:38	03/23/21 03:42	1
8:2 FTS	ND		1.8	0.40	ng/L		03/17/21 19:38	03/23/21 03:42	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*92*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:42*	*1*
13C5 PFPeA	*56*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:42*	*1*
13C2 PFHxA	*111*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:42*	*1*
13C4 PFHpA	*98*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:42*	*1*
13C4 PFOA	*114*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:42*	*1*

Client Sample ID: Raceway
Lab Sample ID: 320-71242-4
Date Collected: 03/11/21 13:40
Matrix: Water
Date Received: 03/13/21 09:05

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C5 PFNA	*121*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:42*	*1*
13C2 PFDA	*130*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:42*	*1*
13C2 PFUnA	*142*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:42*	*1*
13C2 PFDoA	*114*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:42*	*1*
13C2 PFTeDA	*85*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:42*	*1*
13C3 PFBS	*83*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:42*	*1*
18O2 PFHxS	*106*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:42*	*1*
13C4 PFOS	*107*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:42*	*1*
13C8 FOSA	*114*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:42*	*1*
d3-NMeFOSAA	*123*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:42*	*1*
d5-NEtFOSAA	*122*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:42*	*1*
M2-6:2 FTS	*117*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:42*	*1*
M2-8:2 FTS	*124*		*25 - 150*	*03/17/21 19:38*	*03/23/21 03:42*	*1*

Client Sample ID: Groundwater Seep
Lab Sample ID: 320-71242-5
Date Collected: 03/11/21 14:30
Matrix: Water
Date Received: 03/13/21 09:05

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.4	2.1	ng/L		03/17/21 19:38	03/24/21 01:01	1
Perfluoropentanoic acid (PFPeA)	**1.0**	**J**	1.8	0.43	ng/L		03/17/21 19:38	03/24/21 01:01	1
Perfluorohexanoic acid (PFHxA)	**0.82**	**J**	1.8	0.51	ng/L		03/17/21 19:38	03/24/21 01:01	1
Perfluoroheptanoic acid (PFHpA)	**0.54**	**J**	1.8	0.22	ng/L		03/17/21 19:38	03/24/21 01:01	1
Perfluorooctanoic acid (PFOA)	**1.0**	**J**	1.8	0.75	ng/L		03/17/21 19:38	03/24/21 01:01	1
Perfluorononanoic acid (PFNA)	**1.5**	**J**	1.8	0.24	ng/L		03/17/21 19:38	03/24/21 01:01	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.27	ng/L		03/17/21 19:38	03/24/21 01:01	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.97	ng/L		03/17/21 19:38	03/24/21 01:01	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		03/17/21 19:38	03/24/21 01:01	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.1	ng/L		03/17/21 19:38	03/24/21 01:01	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.65	ng/L		03/17/21 19:38	03/24/21 01:01	1
Perfluorobutanesulfonic acid (PFBS)	**0.36**	**J**	1.8	0.18	ng/L		03/17/21 19:38	03/24/21 01:01	1
Perfluorohexanesulfonic acid (PFHxS)	**0.58**	**J**	1.8	0.50	ng/L		03/17/21 19:38	03/24/21 01:01	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		03/17/21 19:38	03/24/21 01:01	1
Perfluorooctanesulfonic acid (PFOS)	**0.57**	**J**	1.8	0.48	ng/L		03/17/21 19:38	03/24/21 01:01	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		03/17/21 19:38	03/24/21 01:01	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.87	ng/L		03/17/21 19:38	03/24/21 01:01	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.4	1.1	ng/L		03/17/21 19:38	03/24/21 01:01	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.4	1.1	ng/L		03/17/21 19:38	03/24/21 01:01	1
6:2 FTS	ND		4.4	2.2	ng/L		03/17/21 19:38	03/24/21 01:01	1
8:2 FTS	ND		1.8	0.41	ng/L		03/17/21 19:38	03/24/21 01:01	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*82*		*25 - 150*	*03/17/21 19:38*	*03/24/21 01:01*	*1*
13C5 PFPeA	*56*		*25 - 150*	*03/17/21 19:38*	*03/24/21 01:01*	*1*
13C2 PFHxA	*109*		*25 - 150*	*03/17/21 19:38*	*03/24/21 01:01*	*1*

Client: New York State D.E.C.
Job ID: 320-71242-1
Project/Site: Mayville #2008000-DEC PIN: H7221

Client Sample ID: Groundwater Seep
Lab Sample ID: 320-71242-5
Date Collected: 03/11/21 14:30
Matrix: Water
Date Received: 03/13/21 09:05

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFHpA	101		25 - 150	03/17/21 19:38	03/24/21 01:01	1
13C4 PFOA	111		25 - 150	03/17/21 19:38	03/24/21 01:01	1
13C5 PFNA	128		25 - 150	03/17/21 19:38	03/24/21 01:01	1
13C2 PFDA	129		25 - 150	03/17/21 19:38	03/24/21 01:01	1
13C2 PFUnA	145		25 - 150	03/17/21 19:38	03/24/21 01:01	1
13C2 PFDoA	136		25 - 150	03/17/21 19:38	03/24/21 01:01	1
13C2 PFTeDA	119		25 - 150	03/17/21 19:38	03/24/21 01:01	1
13C3 PFBS	84		25 - 150	03/17/21 19:38	03/24/21 01:01	1
18O2 PFHxS	108		25 - 150	03/17/21 19:38	03/24/21 01:01	1
13C4 PFOS	119		25 - 150	03/17/21 19:38	03/24/21 01:01	1
13C8 FOSA	131		25 - 150	03/17/21 19:38	03/24/21 01:01	1
d3-NMeFOSAA	123		25 - 150	03/17/21 19:38	03/24/21 01:01	1
d5-NEtFOSAA	123		25 - 150	03/17/21 19:38	03/24/21 01:01	1
M2-6:2 FTS	95		25 - 150	03/17/21 19:38	03/24/21 01:01	1
M2-8:2 FTS	130		25 - 150	03/17/21 19:38	03/24/21 01:01	1

Lab Chronicle

Client: New York State D.E.C.
Job ID: 320-71242-1
Project/Site: Mayville #2008000-DEC PIN: H7221

Client Sample ID: Outfall SW-1
Lab Sample ID: 320-71242-1
Date Collected: 03/11/21 12:45
Matrix: Water
Date Received: 03/13/21 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			471417	03/17/21 19:38	VP	TAL SAC
Total/NA	Analysis	537 (modified)		1	472815	03/23/21 03:14	JRB	TAL SAC
Total/NA	Prep	3535	DL		471417	03/17/21 19:38	VP	TAL SAC
Total/NA	Analysis	537 (modified)	DL	50	473239	03/24/21 01:20	RS1	TAL SAC

Client Sample ID: Mud Creek Sherman Mayville
Lab Sample ID: 320-71242-2
Date Collected: 03/11/21 13:10
Matrix: Water
Date Received: 03/13/21 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			471417	03/17/21 19:38	VP	TAL SAC
Total/NA	Analysis	537 (modified)		1	472815	03/23/21 03:23	JRB	TAL SAC
Total/NA	Prep	3535	DL		471417	03/17/21 19:38	VP	TAL SAC
Total/NA	Analysis	537 (modified)	DL	20	473239	03/24/21 00:33	RS1	TAL SAC

Client Sample ID: Slope Drainage
Lab Sample ID: 320-71242-3
Date Collected: 03/11/21 13:30
Matrix: Water
Date Received: 03/13/21 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			471417	03/17/21 19:38	VP	TAL SAC
Total/NA	Analysis	537 (modified)		1	472815	03/23/21 03:33	JRB	TAL SAC

Client Sample ID: Raceway
Lab Sample ID: 320-71242-4
Date Collected: 03/11/21 13:40
Matrix: Water
Date Received: 03/13/21 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			471417	03/17/21 19:38	VP	TAL SAC
Total/NA	Analysis	537 (modified)		1	472815	03/23/21 03:42	JRB	TAL SAC

Client Sample ID: Groundwater Seep
Lab Sample ID: 320-71242-5
Date Collected: 03/11/21 14:30
Matrix: Water
Date Received: 03/13/21 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			471417	03/17/21 19:38	VP	TAL SAC
Total/NA	Analysis	537 (modified)		1	473239	03/24/21 01:01	RS1	TAL SAC

Laboratory References:
TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: New York State D.E.C.
Job ID: 320-71242-1
Project/Site: Mayville #2008000-DEC PIN: H7221

Laboratory: Eurofins TestAmerica, Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	02-20-24
ANAB	Dept. of Defense ELAP	L2468	01-20-24
ANAB	Dept. of Energy	L2468.01	01-20-24
ANAB	ISO/IEC 17025	L2468	01-20-24
Arizona	State	AZ0708	08-11-21
Arkansas DEQ	State	88-0691	06-17-21
California	State	2897	01-31-22
Colorado	State	CA0004	08-31-21
Connecticut	State	PH-0691	06-30-21
Florida	NELAP	E87570	06-30-21
Georgia	State	4040	01-29-22
Hawaii	State	<cert No.>	01-29-22
Illinois	NELAP	200060	03-18-22
Kansas	NELAP	E-10375	10-31-21
Louisiana	NELAP	01944	06-30-21
Maine	State	CA00004	04-14-22
Michigan	State	9947	01-29-22
Nevada	State	CA000442021-2	07-31-21
New Hampshire	NELAP	2997	04-18-21
New Jersey	NELAP	CA005	06-30-21
New York	NELAP	11666	04-01-21
Ohio	State	41252	01-29-22
Oregon	NELAP	4040	01-29-22
Pennsylvania	NELAP	68-01272	03-31-21
Texas	NELAP	T104704399-19-13	06-01-21
US Fish & Wildlife	US Federal Programs	58448	07-31-21
USDA	US Federal Programs	P330-18-00239	07-31-21
Utah	NELAP	CA000442019-01	02-28-21 *
Vermont	State	VT-4040	04-16-21
Virginia	NELAP	460278	03-14-22
Washington	State	C581	05-05-21
West Virginia (DW)	State	9930C	12-31-21
Wisconsin	State	998204680	08-31-21
Wyoming	State Program	8TMS-L	01-28-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: New York State D.E.C.
Job ID: 320-71242-1
Project/Site: Mayville #2008000-DEC PIN: H7221

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: New York State D.E.C.
Job ID: 320-71242-1
Project/Site: Mayville #2008000-DEC PIN: H7221

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-71242-1	Outfall SW-1	Water	03/11/21 12:45	03/13/21 09:05	
320-71242-2	Mud Creek Sherman Mayville	Water	03/11/21 13:10	03/13/21 09:05	
320-71242-3	Slope Drainage	Water	03/11/21 13:30	03/13/21 09:05	
320-71242-4	Raceway	Water	03/11/21 13:40	03/13/21 09:05	
320-71242-5	Groundwater Seep	Water	03/11/21 14:30	03/13/21 09:05	

Chain of Custody Record 391273

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Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: JV/SM Josh Vaccaro Steve Mueller	Site Contact: Josh Vaccaro	Date: 3/11/21	COC No:
Company Name: NYSDEC	Tel/Email: 716 541-9657	Lab Contact: Oriette Johnson	Carrier:	1 of 1 COCs
Address: 270 Michigan Ave	Analysis Turnaround Time			Sampler:
City/State/Zip: Buffalo NY	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: (716) 541-9657	TAT if different from Below _____			Walk-in Client:
Fax:	☑ 2 weeks			Lab Sampling:
Project Name: Mayville 2008000 HPIN: H7221	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
PO# 48023180 Callout ID: 139660	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	PFAS-21 Analytes - 537.1	Sample Specific Notes:
Outfall SW-1	3/11/21	1245	G	Water	2			2	
Mud Creek Sherman Mayville	3/11/21	1310	G	Water	2			2	
Slope Drainage	3/11/21	1330	G	Water	2			2	
Raceway	3/11/21	1340	G	Water	2			2	
Groundwater Seep	3/11/21	1430	G	Water	2			2	

320-71242 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☑ Yes ☐ No | Custody Seal No.: 1452579 | Cooler Temp. (°C): Obs'd: 2.5 Corr'd: 2.5 | Therm ID No.: 102

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Thomas M. Kaven	NYSDEC	3/12/21 1305		TAS	3/12/21 1305
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TA	3/12/21 1700		3/13/21 EDDS 3/13/21	3/13/21 905
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Sacramento Sample Receiving Notes

320-71242 Field Sheet

Job: _____

Tracking # : 1888 3863 2650

SO / PO / FO / (SAT) / 2-Day / Ground / UPS / CDO / Courier

GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Therm. ID: L01 Corr. Factor: (+ / -) N/A °C

Ice ✓ Wet ✓ Gel _____ Other _____

Cooler Custody Seal: 14 52579

Cooler ID: —

Temp Observed: 2.5 °C Corrected: 2.5 °C

From: Temp Blank ☐ Sample ☑

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☑	☐
Cooler Temperature is acceptable?	☑	☐	☐
Frozen samples show signs of thaw?	☐	☐	☑

Initials: SO Date: 3/13/21

Unpacking/Labeling The Samples	Yes	No	NA
CoC is complete w/o discrepancies?	☑	☐	☐
Samples compromised/tampered with?	☐	☑	☐
Sample containers have legible labels?	☑	☐	☐
Sample custody seal?	☐	☐	☑
Containers are not broken or leaking?	☑	☐	☐
Sample date/times are provided?	☑	☐	☐
Appropriate containers are used?	☑	☐	☐
Sample bottles are completely filled?	☑	☐	☐
Sample preservatives verified?	☐	☐	☑
Samples w/o discrepancies?	☑	☐	☐
Zero headspace?*	☐	☐	☑
Alkalinity has no headspace?	☐	☐	☑
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☑
Multiphasic samples are not present?	☑	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials: SO Date: 3/13/21

Notes: _____

Trizma Lot #(s): _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☑	☐	☐
Samples received within hold time?	☑	☐	☐
NCM Filed?	☐	☐	☑
Log Release checked in TALS?	☑	☐	☐

Initials: SO Date: 3/13/21


ORIGIN ID:DKKA (716) 691-2600
SAMPLE RECEIPT
EUROFINS TESTAMERICA BUFFALO
10 HAZELWOOD DR
AMHERST, NY 14228
UNITED STATES US
SHIP DATE: 12MAR21
ACTWGT: 31.85 LB.
CAD: 846654/CAFE3409
DIMS: 19x15x10 IN
BILL SENDER
TO SAMPLE RECEIVING
TA SACRAMENTO
880 RIVERSIDE PARKWAY
WEST SACRAMENTO CA 95605
(916) 373-5600
REF: TA SACRAMENTO
FedEx
Express
eurofins
SATURDAY 12:00P
PRIORITY OVERNIGHT
1888 3863 2650
95605
CA-US SMF
Custody Seal
DATE
SIGNATURE
very
145

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 320-71242-1

Login Number: 71242 **List Source: Eurofins TestAmerica, Sacramento**
List Number: 1
Creator: Her, David A

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	1452379
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	